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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/618,499 | 07/11/2003 | John C. Colvin | 124-0002US-D | 5385 |
| 29855 | 7590 | 12/14/2004 | | |
| WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, P.C. 20333 SH 249 SUITE 600 HOUSTON, TX 77070 | | | EXAMINER | TRAN, THAO T |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1711 | |

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|-----------------|---------------|
| | 10/618,499 | COLVIN ET AL. |
| Examiner | Art Unit | |
| Thao T. Tran | 1711 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 September 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-44 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-40 and 42-44 is/are rejected.

7) Claim(s) 41 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 11 July 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments received on September 30, 2004.
2. Claims 1-44 are currently pending in this application. Claims 33-44 have been newly added. Claims 1, 15-22, 29-32 have been amended.

Claim Objections

3. In view of the prior Office action of June 30, 2004, the objection to claims 1-14 has been withdrawn due to the amendments made thereto.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 35-36 and 42-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added claims 35-36 contain the limitation "a preexisting binder" that was not in the specification as originally presented.

The newly added claim 42 contains the limitation “equal to approximately 80% of the initial water absorption value” that was not in the specification as originally presented.

The newly added claim 43 contains the limitation “equal to approximately 23% of the initial water absorption value” that was not in the specification as originally presented.

The newly added claim 44 contains the limitation “equal to approximately 14% of the initial water absorption value” that was not in the specification as originally presented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 15-23, 33-40, 42-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Diehr et al. (US Pat. 3,870,665).

In regards to claims 1-5, 15-23, 33-34, 37-39, Diehr teaches a sheet or board for building purposes, comprising a lignocellulosic material, impregnated with an organic polyisocyanate (see abstract; col. 1, ln. 6-27). The lignocellulosic material used can be chipboard, fiberboard, wood, or straw (see col. 1, ln. 32-34; col. 4, ln. 46-51). The isocyanate is diphenylmethane diisocyanate (methylene diphenyl diisocyanate) (see Example 1). Diehr further teaches the surface of the board to be smooth (see Example 8).

Although Diehr is silent with respect to a low-gloss surface or that the impregnated lignocellulosic material is substantially non-conductive, since the reference teaches the same

product containing the same chemical constituents, the board of the reference would inherently have the same properties, such as low-gloss surface and substantially non-conductive, as the presently claimed invention.

With respect to process limitations, such as how the lignocellulosic material is being formed or how impregnation is carried out, it has been within the skill in the art that process limitations would have no significant patentable weight when a product claim is being considered. See MPEP 2113.

In regards to claims 35-36, Diehr teaches the lignocellulosic material containing a urea-formaldehyde or phenol-formaldehyde binder (see claim 10).

In regards to claim 40, Diehr teaches the lignocellulosic material containing 7% moisture content before impregnation of polyisocyanate (see Examples 9-10).

In regards to claims 42-44, Diehr teaches the lignocellulosic material being moisture-resistant (see Example 1, 5), which appears to read on the instantly claimed ranges.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6-14 and 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diehr as applied to claims 1 and 14 above.

Diehr is as set forth in claims 1 and 14 above and incorporated herein.

Diehr teaches the lignocellulosic material to be used in building purposes such as veneer, sheets, and the like (see col. 1, ln. 6-21). Hence, although the reference does not specifically teach the material to be used as construction components as recited in the instant claims, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that these structures would have been variations in the use of the lignocellulosic material.

Allowable Subject Matter

10. Claim 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: no prior art has been found to teach, disclose, or fairly suggest a lignocellulosic substrate comprising a moisture content of about 0.1 to 2.5% by weight after the substrate is dried and before the substrate is impregnated with the polyisocyanate material; in combination with all of the limitations of claims 16 and 40.

Response to Arguments

12. Applicant's arguments filed September 30, 2004 have been fully considered but they are not persuasive.

On page 9 of the Remarks, Applicants allege that Diehr does not teach all the process limitations as recited in instant claim 1, it is hereby noted that since Diehr teaches the same

product with the same chemical constituents, process limitations on how the product is made would have no significant patentable weight.

On page 10 of the Remarks, Applicants contend that the reference of Diehr only teaches the polyisocyanate as a binder, and not an impregnating agent as recited in instant claims 1 and 16. However, as pointed out in paragraph 7 above, Diehr does teach the use of polyisocyanates as binders and/or impregnating agents (see col. 1, ln. 22-23; col. 4, ln. 54-55).

With respect to the arguments, throughout the Remarks, that Diehr does not teach the surface of the lignocellulosic material to be low-gloss, since the reference teaches the lignocellulosic material having the same chemical constituents and a smooth surface, the lignocellulosic material of Diehr would inherently have a surface that is low-gloss, as that in the presently claimed invention.

Thus, Diehr does teach the presently claimed invention.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt
December 9, 2004

Thao Tran
THAO T. TRAN
PATENT EXAMINER